

Listing of the Claims:

1. (currently amended) An alloy having favorable fatigue resistance and comprising, in weight percent based on total alloy weight:
at least 20 weight percent cobalt;
32.7 to 37.3 weight percent nickel;
18.75 to 21.25 weight percent chromium;
8.85 to 10.65 weight percent molybdenum; and
less than 30 ppm nitrogen;
less than 0.7 weight percent titanium;
at least one of at least 0.05 weight percent aluminum, at least 5 ppm calcium, at
least 5 ppm magnesium, and at least 5 ppm cerium; and
no greater than 1.05 weight percent iron; and
wherein the alloy includes generally spherical oxide inclusions and is substantially free
of titanium nitride and mixed metal carbonitride inclusions.
2. (original) The alloy of claim 1, comprising less than 20 ppm nitrogen.
3. (cancelled)
4. (original) The alloy of claim 1, further comprising less than 0.03 weight percent titanium.
5. (currently amended) The alloy of claim 1, further comprising:
no greater than 0.035 weight percent carbon;
no greater than 0.18 weight percent manganese;
no greater than 0.17 weight percent silicon;
no greater than 0.020 weight percent phosphorus;
no greater than 0.015 weight percent sulfur;

~~no greater than 1.05 iron; and~~
no greater than 0.020 weight percent boron.

6. (currently amended) The alloy of claim 1, comprising:
~~at least 20 cobalt~~
33.0 to 37.0 weight percent nickel;
19.0 to 21.0 weight percent chromium; ~~and~~
9.0 to 10.5 weight percent molybdenum;
~~less than 30 ppm nitrogen.~~
7. (currently amended) The alloy of claim 6, further comprising:
no greater than 0.025 weight percent carbon;
no greater than 0.15 weight percent manganese;
no greater than 0.15 weight percent silicon;
no greater than 0.015 weight percent phosphorus;
no greater than 0.010 weight percent sulfur;
no greater than 1.0 weight percent iron; and
no greater than 0.015 weight percent boron.
8. (original) The alloy of claim 7, comprising less than 20 ppm nitrogen.
9. (cancelled)
10. (original) The alloy of claim 7, further comprising less than 0.03 weight percent titanium.
11. (cancelled)

12. (currently amended) The alloy of claim 1, further comprising 0.05 to 0.15 weight percent aluminum.
13. (currently amended) The alloy of claim 1, further comprising 5 to 20 ppm calcium.
14. (currently amended) The alloy of claim 1, further comprising 5 to 50 ppm weight percent magnesium.
15. (currently amended) The alloy of claim 1, further comprising 5 to 50 ppm cerium.
16. (original) The alloy of claim 1, wherein the alloy does not exhibit significant oxygen embrittlement at grain boundaries.
17. (original) The alloy of claim 1, wherein the alloy is substantially free of titanium.
18. (original) The alloy of claim 1, wherein the alloy is substantially free of nitrogen.
19. (original) The alloy of claim 1, wherein the alloy has an endurance limit greater than 100 ksi.
20. (original) The alloy of claim 1, wherein the alloy qualifies for use in surgical implant applications under ASTM standard specification F 562.
- 21-31. (cancelled)
31. (second) (cancelled)

32. (currently amended) An article of manufacture comprising the alloy of any of claims 1, 2, 4-8, 10, and 12-20 ~~1 through 31 and 50 through 52~~.

33. (original) The article of manufacture of claim 32, wherein the article of manufacture is selected from a bar, a wire, a tube, a surgical implant device, a component for a surgical implant device, an implantable defibrillator, a component for an implantable defibrillator, an implantable pacemaker, a component for an implantable pacemaker, a pacing lead, and a cardiac stent.

34. (original) The article of manufacture of claim 32, wherein the article of manufacture is one of a bar and a wire, and qualifies for use in surgical implant applications under ASTM standard specification F 562.

35-52. (cancelled)